Title: SYSTEM AND METHOD FOR AUTOMATIC AND ADAPTIVE USE OF ACTIVE NETWORK PERFORMANCE MEASUREMENT

TECHNIQUES TO FIND THE FASTEST SOURCE

Assignee: Intel Corporation

IN THE CLAIMS

Please amend the claims as follows.

- (Currently Amended) A method for managing a plurality of sources comprising: determining an empirical measurement of a performance of each of the plurality of sources;
 - the determining including obtaining an empirical measurement of a throughput speed of each of the plurality of sources from at least one third-party source; and selecting a source in reference to the empirical measurements of the performance of each of the plurality of sources and the at least one third-party source[[.]]: and initiating a download of data to a download source of the plurality of sources.
- 2. (Cancelled)
- (Original) The method of claim 1, wherein the determining further comprises:
 obtaining an empirical measurement of a throughput speed of each of the plurality of sources from a local source.
- 4. (Original) The method of claim 1, wherein the performance further comprises a throughput speed.
- 5. (Original) The method of claim 1, wherein the performance comprises latency.
- 6. (Previously Presented) The method of claim 5, wherein the determining the empirical measurement further comprises:

measuring the elapsed time of a transmission involving each of the plurality of sources.

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7. (Previously Presented) The method of claim 5, wherein the determining the empirical measurement further comprises for each of the plurality of sources:

recording transmission time from the current time and date;
initiating a transmission to a download source of the plurality of sources;
receiving a response to the transmission from the source;
recording the receipt time from the current date and time; and
determining the throughput speed of the source from the difference between the receipt
time and the transmission time.

8. (Currently Amended) A computer-accessible medium having executable instructions for managing a plurality of sources, said executable instructions capable of directing a processor to perform:

determining an empirical measurement of a throughput speed of each of the plurality of sources;

the determining including obtaining an empirical measurement of the throughput speed of each of the plurality of sources from at least one third-party source; and selecting a source in reference to the empirical measurements of the throughput speed of each of the plurality of sources and the at least one third-party source[[.]]; and initiating a download of data to a download source of the plurality of sources.

- 9. (Original) The medium of claim 8, wherein the throughput speed further comprises a download speed.
- 10. (Original) The computer-readable medium of claim 8, wherein said instruction for determining further comprises an instruction capable of directing the processor to perform: measuring a throughput speed of each of the plurality of sources.

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11. (Original) The medium of claim 10, wherein said instruction for measuring further comprises instructions capable of directing the processor to perform for each of the plurality of sources:

recording transmission time from the current time and date; initiating a transmission to a download source of the plurality of sources; receiving a response to the transmission from the source; recording the receipt time from the current date and time; and determining the throughput speed of the source from the difference between the receipt time and the transmission time.

12. (Currently Amended) A computer data signal embodied in a carrier wave and representing a sequence of instructions for managing a plurality of sources which, when executed by a processor, cause the processor to perform the method of:

determining an empirical measurement of a download speed of each of the plurality of sources;

the determining including obtaining an empirical measurement of the download speed of each of the plurality of sources from at least one third-party source; and selecting a source in reference to the empirical measurement of the download speed of each of the plurality of sources and the at least one third-party source[[.]]; and initiating a download of data to a download source of the plurality of sources.

13. (Original) The computer data signal of claim 12, wherein the determining further comprises for each of the plurality of sources:

recording transmission time from the current time and date;
initiating a transmission to a download source of the plurality of sources;
receiving a response to the transmission from the source;
recording the receipt time from the current date and time; and
determining the throughput speed of the source from the difference between the receipt
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(Original) The computer data signal of claim 12, wherein the throughput speed further 14. comprises latency.

(Currently Amended) A computerized method for managing a plurality of sources 15. comprising:

storing transmission time from the current time and date; initiating a transmission to a download source of the plurality of sources; receiving a response to the transmission from the source; storing the receipt time from the current date and time; determining a latency of the source from the difference between the receipt time of the response and the transmission time of the transmission; and selecting a source in reference to the latency of each of the plurality of sources[[.]]; and initiating a download of data to a download source of the plurality of sources.

- 16. (Original) The computerized method of claim 15, wherein source further comprises a source in a peer-to-peer network.
- 17. (Original) The computerized method 15, wherein the: the transmission further comprises a TCP/IP synchronized idle message; and the response further comprises a TCP/IP acknowledgment message.
- (Currently Amended) A computer-accessible medium having executable instructions for 18. managing a plurality of sources, said executable instructions capable of directing a processor to perform:

determining a plurality of round-trip timings of a packet transmission in conjunction with each of a plurality of possible sources;

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the determining including obtaining an empirical measurement of the round-trip timings of the packet transmission of each of the plurality of sources from at least one third-party source; and

selecting a source in reference to the plurality of round-trip timings and the plurality of round-trip timings of the at least one third-party source[[.]]; and initiating a download of data to a download source of the plurality of sources.

- 19. (Original) The medium of claim 18, wherein the source further comprises a source in a peer-to-peer network.
- 20. (Previously Presented) The medium of claim 18, wherein said instruction for determining further comprises instructions capable of directing the processor to perform: recording transmission time from the current time and date; initiating a transmission to a download source of the plurality of sources; receiving a response to the transmission from the source; recording the receipt time from the current date and time; and determining the round-trip timing of the download source from the difference between the receipt time of the response and the transmission time of the transmission.
- 21. (Currently Amended) A computerized method for managing a plurality of sources comprising:

obtaining a list comprising a plurality of identification of sources;

initiating a plurality of socket connections, the plurality of socket connections further comprising one socket connection for each of the plurality of sources, yielding a plurality of initiated socket connections;

the initiating including obtaining an empirical measurement of a throughput speed of each of the plurality of sources from at least one third-party source;

receiving a response for the each of the plurality of initiated socket connections, yielding a plurality of responses; and

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selecting the fastest source of the plurality of sources in reference to a predetermined file size and in reference to the plurality of responses and to the plurality of sources from the at least one third-party source[[.]]; and initiating a download of data to a download source of the plurality of sources.

- 22. (Original) The computerized method of claim 21, wherein the predetermined file size is less than a predetermined threshold file size and wherein the selecting further comprises: selecting the source associated with the response that is received first.
- 23. (Original) The computerized method of claim 21, wherein the predetermined file size is greater than a predetermined threshold file size and wherein the selecting further comprises: measuring the latency of each of the plurality of sources; and selecting a source in reference to the download speed of each of the plurality of sources.
- 24. (Previously Presented) The computerized method of claim 23, wherein measuring the latency further comprises:

storing the time and date of each of the plurality of initiating socket connections; storing the time and date of each of the plurality of responses; and determining the download speed of each of the plurality of sources from the differences in time between the time and date of each of the plurality of the responses and the time and date of each of the plurality of the initiating socket connections.

25. (Currently Amended) A system for managing sources in a peer-to-peer network comprising:

a processor;

software means operative on the processor for determining an empirical measurement of a throughput speed of each of the plurality of sources;

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the software means including obtainer means to obtain an empirical measurement of a throughput speed of each of the plurality of sources from at least one third-party source; and

- the software means selecting a source in reference to the empirical measurements of the throughput speed of each of the plurality of sources and the at least one third-party source[[.]]; and
- a transmitter to initiate a download of data to a download source of the plurality of sources.
- 26. (Original) The system of claim 25, wherein the throughput speed further comprises a round-trip time.
- 27. (Original) The system of claim 25, wherein the throughput speed further comprises a latency.
- 28. (Currently Amended) A computerized system comprising:
 - a determiner of an empirical measurement of a throughput speed of each of the plurality of download peer-to-peer network sources;
 - the determining including obtaining an empirical measurement of a throughput speed of each of the plurality of sources from at least one third-party source; and
 - a selector of a source in reference to the empirical measurement of the throughput speed of each of the plurality of peer-to-peer network sources and the at least one third-party source[[.]]; and
 - a transmitter to initiate a download of data to a download source of the plurality of peerto-peer network sources.
- 29. (Previously Presented) The computerized system of claim 28, the determiner further comprising:
 - a transmitter of to transmit a message to a download source of the plurality of sources;

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a recorder of the time of a transmission of a message, operably coupled to the transmitter; a receiver of a response to the transmission from the source, operably coupled to the transmitter;

a recorder of the time of receipt of a response; and
a determiner of the throughput speed of the source, from the difference between the
receipt time and the transmission time.

30. (Original) The computerized system of claim 28, wherein the:
the message further comprises a TCP/IP synchronized idle message; and
the response further comprises a TCP/IP acknowledgment message.